

REMARKS

The above amendments to the claims, and the following remarks, are submitted together with a Request for Continued Examination.

Claims 1-19, 21-40, and 42-52 are currently pending in the application, of which claims 1, 19, 32, 40, 51, and 52 are independent claims. Claims 1, 3, 8, 19, and 48 have been amended to more particularly point out and distinctly claim the invention. Claims 1-19, 21-40, and 42-52 are respectfully submitted for consideration.

Claims 1-19 and 21-31 were rejected under 35 U.S.C. 101 as allegedly drawn to unpatentable subject matter. Applicants respectfully submit that the claims recite patentable subject matter.

Claim 1, as amended, recites “communicating header information,” as well as “using the determined type of classification to control the communication and compression of the information.” Communicating information and controlling the communication of information are not “an abstract idea” and are “tangible, concrete, and useful.” Furthermore, the recitation of “header” information as well as of “compression” further demonstrate that the claim is not merely to an abstract idea, but produces tangible, concrete, and useful result. Header compression is useful in many applications, such as, for example, switched communication networks. Accordingly, Applicants respectfully submit that claim 1 clearly recites subject matter that is patentable under 35 U.S.C. 101.

Claim 19 has its own scope, but similarly recites “forming a compressed list of items” and “transmitting said compressed list as compressed header.” These features are

similarly not merely abstract ideas and are concrete, tangible, and useful. Accordingly, Applicants respectfully traverse the rejection of claim 19.

Additionally, both claims 1 and 19 recite, as an intended use, “for header compression,” in the preambles of the claims. This intended use clearly establishes that the methods have a use that is concrete, tangible, and useful, since header compression meets all of those requirements. For this additional reason, it is respectfully requested that the rejection be withdrawn.

Claims 2-18 and 21-31 respectively depend from and further limit claims 1 and 20. Accordingly, Applicants respectfully submit that claims 2-18 and 21-31 also recite subject matter that is useful and patentable.

Claims 1-3, 14-15, 19, 21-22, 32-34, 40, 42-43, and 51-52 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,864,860 of Holmes in view of U.S. Patent No. 5,481,712 of Silver et al. (“Silver”). The Office Action took the position that Holmes discloses all of the features of independent claims 1, 19, 32, 40, and 51-52, except “determining the type of classification based on the comparing items” and “using the classification type to control the communication.” The Office Action cited Silver to remedy these deficiencies of Holmes. Applicants respectfully traverse this rejection.

Claim 1, upon which claims 2-18 depend, is directed to a method for header compression. The method includes communicating header information. The method also includes comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The method further includes

determining a type of classification based on the comparing of the items of the lists. The method additionally includes using the determined type of classification to control the communication and compression of the information.

Claim 19, upon which claims 21-31 depend, is directed to a method for header compression. The method includes classifying at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items. The method also includes based upon the classifying of the at least one item of the current list, forming a compressed list including the at least one item. The method further includes transmitting the compressed list as a compressed header. The method additionally includes determining a type of classification based on the comparing.

Claim 32, upon which claims 33-39 depend, is directed to a device including a processor configured to compare a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The processor is also configured to determine a type of classification based on the comparing of the items of the lists. The processor is further configured to communicate compressed information based upon the determined type of classification.

Claim 40, upon which claims 42-50 depend, is directed to a device including a processor configured to classify at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items. The processor is also configured, based upon the classifying of the at least one item of the

current list, to form a compressed list including the at least one item. The device further includes a transmitter configured to transmit the compressed list. The processor is configured to determine a type of classification based on the comparing.

Claim 51 is directed to a device including comparing means for comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The device also includes determining means for determining a type of classification based on a comparing of the items of the lists. The device further includes communicating means for communicating the compressed information based upon a determined type of classification.

Claim 52 is directed to a device including classifying means for classifying at least one item of a current list containing a plurality of items. The device also includes comparing means for comparing the current list with a reference list containing a plurality of items. The device further includes forming means for, based upon the classifying of the at least one item of the current list, forming a compressed list including the at least one item. The device additionally includes means for transmitting the compressed list. The classifying means is configured to classify based on a comparing of the current list with the reference list.

Applicants respectfully submit that the combination of Holmes and Silver fails to disclose or suggest all of the elements of any of the presently pending claims.

Holmes relates to compression of structured data. Specifically, as explained in columns 3-4, Holmes relates to data compression in the area of delimited text databases.

For example, each row (or record) of data will contain a set of fields delimited from each other by a character. Holmes discloses comparing a field of a current record with a corresponding field of a previous record. Holmes suggests creating a compressed form of the current record based on the current row. The compressed form of the current record is the same as the current record except that, if the contents of a field of the current record are identical to that of the corresponding field in the previous record, a single character (such as a ".") is used in place of the contents. When all of the fields have been compared and (if appropriate) compressed, the compressed form of the current record is passed to the client.

As the Office Action recognized, Holmes fails to disclose or suggest all of the elements of any of the presently pending claims. The Office Action supplied Silver to remedy the deficiencies of Holmes.

Silver generally relates to a method and apparatus for interactively generating a computer program for machine vision analysis of an object. The Office Action asserted that, at column 50, lines 30-44, and column 61, lines 7-18, Silver discusses "a list of items this is a mutable ordered collection of elements, wherein the list of items can have elements added or removed from the front or back; the list has a notion of current item and insertion and removal can be performed from there." The Office Action continues by asserting that "Such lists disclosed by Silver can be traversed in forward and backward order."

The Office Action stated that such disclosure is similar to the disclosure at page 21, lines 1-9, of the present specification. The Office Action, therefore, concluded that Silver discloses “determining the type of classification based on the comparing items” and “using the classification type to control the communication,” thereby remedying the deficiencies of Holmes.

Applicants respectfully submit that there is no discussion in the cited passages of Silver of any determination of any type of classification based on any comparison of items. Silver does mention, at column 50, lines 34-41, that a comparison is made to determine whether a list place is actually a place on that particular list which is under consideration or not. That appears to be the closest discussion to anything approaching what is claimed, namely “determining a type of classification based on said comparing of the items of the lists,” as recited, for example, in claim 1.

Furthermore, there is no discussion of “using the determined type of classification to control the communication and compression of the information” (as recited in claim 1) in the cited passages of Silver. The cited passages of Silver do not even appear to mention the communication of information, much less control of such communication using a determined type of classification. Accordingly, Applicants respectfully submit that Silver fails to remedy either of the admitted deficiencies of Holmes.

Moreover, there is not proper legally sufficient motivation to combine the references. The Office Action took the position that it would have been obvious to combine the references to modify Holmes to include the alleged teachings of Silver “for

the purpose of ensuring the validity of the data item; thereby enabling a reduction in the amount of data to be transferred.” The Office Action did not cite any evidence to support this alleged motivation to combine.

The alleged motivation to combine is puzzling, because Silver is not particularly related to ensuring the validity of data items or to enabling reduction in data to be transferred. Silver does mention that a determination as to validity is made at column 50, lines 38-40, but this is subsequent to the comparison that is described at column 50, lines 34-38. Furthermore, the reason that Silver provides for employing the procedures described at column 50, lines 30-44, is as a safeguard to enhance the “modicum of mechanism to deal with the possibly obscure problem of requesting a list place on a list other than the one you got the place from” as stated at column 50, lines 23-29.

The Office Action’s position that one of ordinary skill in the art would have extracted two rather minor points from Silver’s lengthy disclosure, whose primary subject is machine vision analysis of an object, based on the alleged motivation to combine seems unreasonable. Accordingly, the proposed combination seems to be motivated not by the references, but only by the present application, which is improper hindsight reconstruction. Thus, Applicants respectfully request that the rejection be withdrawn for this additional reason.

Claims 4-13, 16-18, 23-29, 34-39, and 44-50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Silver and further in view of U.S. Patent No. 6,535,925 of Svanbro et al. (“Svanbro”). The Office Action took the position that

certain further limitations of the rejected claims were not disclosed or suggested by the combination of Holmes and Silver. The Office Action, therefore, cited Svanbro to remedy the deficiencies of Holmes and Silver. Applicants respectfully traverse this rejection.

Claims 4-13, 16-18, 23-29, 34-39, and 44-50 depend from claims 1, 19, 32, and 40 respectively, and recite additional limitations. The impossibility of Holmes and Silver disclosing the combination of recitations in the claims is explained above. Svanbro aggravates the deficiencies of Holmes and Silver, because it does not provide teaching, motivation, or suggestion to make the combination of Holmes and Silver, or to make the further combination including Svanbro's own teachings with those of Holmes and Silver.

Svanbro generally relates to packet header compression using division remainders. Specifically, in columns 5-8, Svanbro describes a header compression (Figure 3), time stamp compression (Figure 4), time stamp decompression (Figures 5 and 7), and header decompression (Figure 6). Svanbro recommends using convention header compression techniques augmented by separately compressing the time stamp. With regard to the time stamp compression, Svanbro teaches that advance knowledge obtained by empirical observation can be used to reduce the number of bits needed to encode a relatively predictable time stamp in an application such as a real-time speech service.

There is no motivation to combine Svanbro with Silver for essentially the same reasons there is no motivation to combine Holmes with Silver. Svanbro and Silver are aimed at compressing radically different kinds of information. Thus, one of ordinary

skill interested in machine vision analysis of an object might look to Silver, but would not look to Svanbro. Similarly, one of ordinary skill interested in compressing header data might look to Svanbro, but would not look to Silver. Therefore, the combination of Svanbro and Silver is an improper combination, and, as explained above, the result of improper hindsight reconstruction. Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 1-2, 14-15, 19, 21, 27-28, and 33-52 were rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of U.S. Patent 6,321,208 of Barnett et al. (“Barnett”). The Office Action did not explain this rejection at all. Applicants respectfully traverse this rejection.

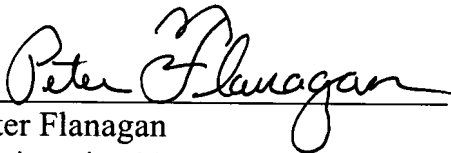
Because there is no explanation, this rejection clearly fails to establish a *prima facie* case of obviousness. Furthermore, Barnett is from yet another technological area (than the other references cited in this Office Action), and generally relates to a method and system for electronic distribution of product redemption coupons. Accordingly, unsurprisingly, Barnett fails to remedy the admitted deficiencies of Holmes and there is no motivation, teaching, or suggestion to combine the references. Thus, it is respectfully requested that this rejection be withdrawn.

For the reasons explained above, it is respectfully submitted that each of claims 1-19, 22-40, and 42-52 recites subject matter that is useful and is neither disclosed nor suggested in the cited art. It is, therefore, respectfully requested that all of claims 1-19, 22-40, and 42-52 be allowed, and that this application be passed to issuance.

If, for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


Peter Flanagan
Registration No. 58,178

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

PCF/kzw

Enclosures: Request for Continued Examination (RCE); Check No. 16242